

In the Specification:

Please enter the substitute specification attached hereto. A marked-up copy of the specification, showing the changes made thereto, is also attached.

In the Claims:

Please cancel claims 3 and 4 without prejudice or disclaimer.

Please amend claims 1, 2 and 5-9 to read as follows. A marked-up copy of claims 1, 2 and 5-9, showing the changes made thereto, is attached.

B1

1. (Twice Amended) A single-crystalline film having a thickness, said single-crystalline film retaining a single crystal state having uniform molecular crystalline alignment over the thickness provided through phase transition from a liquid crystal phase including a smectic phase, said single-crystalline film comprising a smectic liquid crystal material having a molecular long axis and providing a uniform molecular alignment including a single direction of the molecular long axis in a smectic layer.

2. (Amended) The single-crystalline film according to Claim 1, wherein the liquid crystal phase includes a lower order liquid crystal phase and a higher order liquid crystal phase.

B2  
3.  
3. (Amended) The single-crystalline film according to Claim 1, wherein the smectic liquid crystal material has a molecular structure which is symmetrical with respect to the molecular long axis.

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6. (Twice Amended) A process for producing a single-crystalline film comprising the steps of:

disposing a smectic liquid crystal material, having a molecular long axis and exhibiting a uniform molecular alignment including a single direction of the molecular long axis in a smectic layer, between a pair of boundaries having a thickness, and cooling and solidifying the smectic liquid crystal material through its smectic phase into a single-crystalline film,

wherein said smectic liquid crystal retains a single crystal state having a uniform molecular crystalline alignment over the thickness.

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7. (Amended) The process according to Claim 6, wherein the smectic liquid crystal material has a molecular structure which is symmetrical with respect to the molecular long axis.

3/4  
8. (Amended) The process according to Claim 6, wherein the crystallization step includes sub-steps of once forming a polycrystal state by causing phase transition from a liquid crystal phase and transforming the polycrystal state into a single crystal state.